



PATENT ABSTRACTS OF JAPAN

(11) Publication number: **11197151 A**(43) Date of publication of application: **27.07.1999**

(51) Int. Cl. **A61B 8/00**
G06T 1/00

(21) Application number: **10304666**
 (22) Date of filing: **27.10.1998**
 (30) Priority: **07.11.1997 US 97 966376**

(71) Applicant: **GENERAL ELECTRIC CO <GE>**
 (72) Inventor: **MO LARRY Y L**
MILLER STEVEN C

(54) **B MODE PROCESSOR AND POST
 DETECTION IMAGE PROCESSING METHOD
 FOR ULTRASONOGRAPH**

(57) Abstract:

PROBLEM TO BE SOLVED: To provide a method and a device for performing the adaptive emphasis of B mode images at the time of a post-detection image processing in an ultrasoniograph system.

SOLUTION: In this B mode processor, a low-pass filter 52a for smoothing speckles and a high-pass filter 50 for performing edge emphasis are arranged at parallel signal passages connected to the output of an envelope detector. The signals of the signal passage of the high-pass filter 50 are passed through a logarithm compression means 48a before the high-pass filter 50 and the signals of the signal passage of the low-pass filter 52a are passed through the logarithm compres-

sion means 48b after the low-pass filter 52a. Respective weighting coefficients are added to the respective output signals of the low-pass filter 52a and the high-pass filter 50 by an adaptive weighting means 56. The weighted signals are added 60 and then, inputted to the low-pass filter 52b for aliasing prevention before decimation and scanning conversion by optional selection.

COPYRIGHT: (C)1999,JPO

